

WHAT IS CLAIMED IS:

1. A system for depositing solder onto a substrate, the system comprising:
- 5 a horizontal member adapted to hold said solder;
a receiving member having a rotatable portion adapted to receive said substrate opposite said horizontal member; and
a contact member having protruding portions adapted to selectively contact said substrate when disposed on said receiving member, said contact member being positioned between said horizontal member and said receiving member,
- 10 whereby said rotatable receiving member and said contact member functionally cooperate to hold said received substrate in a substantially planar position with respect to said horizontal member before and after said solder is deposited thereon.
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2. The system of Claim 1 wherein said solder comprises a plurality of solder balls, said solder balls being space apart at a predetermined distance.
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3. The system of Claim 1 wherein said rotatable receiving member comprises a base; and
a vertical member removably coupled to said base defining a T-shaped structure, said vertical member being adapted to act as an air conduit for selectively holding said substrate on said base.
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4. The system of Claim 3 wherein said vertical member has a pivoting portion adapted to orient said base in a plurality of different positions with respect to said horizontal member.

5 5. The system of Claim 4 wherein said vertical member includes a rotating vacuum coupling.

6. The system of Claim 1 wherein said contact member includes an aligner plate, wherein said protruding portions of said aligning plate are stoppers adapted to contact the outer edges of said substrate and set the planar alignment thereof.

7. The system of Claim 1 wherein said horizontal member and said receiving member are positionable with respect to each other along a vertical axis.

8. The system of Claim 1 wherein said protruding portions form stoppers adapted to fix said substrate at a predetermined location between said horizontal member and said receiving member.

9. The system of Claim 5 wherein said vertical member comprises:
a top portion;
a bottom portion; and
a circular pivoting member coupled between said top and bottom portions, said pivoting member allowing said base to swivel in a plurality of different positions.

10. The system of Claim 9 wherein said pivoting member is a rotating vacuum coupling.

11. The system of Claim 1 wherein said horizontal member is a solder ball mount.

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12. A method of depositing a solder onto a substrate, comprising the steps of:

positioning said substrate on a receiving member having a pivotable portion;

5 engaging said substrate with a contact member, whereby the pivotable receiving member establishes planarity of said substrate with respect to said contact member; and

depositing solder on said substrate.

10 13. The method of Claim 12 wherein said contact member has protruding side portions, said protruding side portions forming stoppers adapted to stop said substrate at a predetermined position with respect to such receiving member.

15 14. The method of Claim 12 wherein contact member comprises an aligner plate opposing said pivotable receiving member.

15. The method of Claim 12 wherein said pivoting receiving member comprises:

20 a base;

a vertical member pivotably coupled to said base and defining a T-shaped support, wherein said vertical member is adapted to act as an air conduit for holding said substrate on said base.

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16. The method of Claim 12 wherein said pivotable receiving member comprises:

a top portion;

a bottom portion; and

5 a pivotable member coupled between said top and bottom portion, wherein said pivotable portion is rotatable in a plurality of different dimensions.

17. The method of Claim 12 wherein said solder ball mount configures a plurality of linearly configured soldering balls.

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18. The method of Claim 15 wherein said pivoting vertical member is a pivotable vacuum.